DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES LICENSING AND REGULATORY AFFAIRS

BUREAU OF SAFETY AND REGULATION DIRECTOR'S OFFICE

GENERAL INDUSTRY SAFETY STANDARDS COMMISSION

FILED WITH THE SECRETARY OF STATE ON MARCH 14, 2013

These rules become effective immediately upon filing with the Secretary of State unless adopted under section 33, 44, or 45a(6) of 1969 PA 306. Rules adopted under these sections become effective 7 days after filing with the Secretary of State.

These rules take effect 15 days after filing with the Secretary of State

(By authority conferred on the director of the department of consumer and industry services licensing and regulatory affairs by sections 16 and 21 of 1974 PA 154, MCL 408.1016 and 408.1021, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030 Act No. 154 of the Public Acts of 1974, as amended, and Executive Reorganization Order No. 1996-2, being §§408.1016, 408.1021, and 445.2001 of the Michigan Compiled Laws)

R 408.14246, R 408.14263, R 408.14267, R 408.14269, and R 408.14273 of the Michigan Administrative Code are amended and R 408.14231 is rescinded, as follows:

PART 42. FORGING

R 408.14231. Guards, general. Rescinded.

Rule 4231. (1) A press, hammer, upsetter, bolt header, riveting machine or bulldozer having a flywheel, shaft, clutch and gears not confined within the frame shall be arranged with guards as prescribed in the general industry safety standards commission standard, Part 7, Guards for Power Transmission.

(2) An overhead part which may fall or fly off shall be secured or by other means prevented from falling.

R 408.14246. Steam and pneumatic hammers.

Rule 4246. (1) A steam or air hammer shall be equipped with a functional safety cylinder head to act as a cushion if the piston rod breaks or pulls out of the ram.

- (2) A steam hammer shall be provided with a quick access emergency shut-off valve identified by name or color in the supply, sometimes called admission, pipeline at a location within reach of the operator. This valve shall be closed and locked in the "off" position while the hammer is being adjusted, repaired, or serviced, or when the die are being changed, except where necessary to move the ram.
- (3) If the steam hammer cylinder is constructed without a self-draining arrangement, a drain cock shall be provided which shall be piped to a sump or drain pipe.
- (4) A pneumatic hammer shall have a drain cock on the main head cylinder and on the clamp cylinder, if a clamp cylinder is provided.
- (5) Steam or air pressure at the hammer shall be no higher than that for which the hammer is designed. A pressure regulator and safety valve at the source of power or at the equipment, whichever is applicable, shall be used to insure this.
- (6) A steam pipe shall be covered where exposed to contact. Pipe supports or other effective means shall be provided to prevent failure from vibration, expansion, or contraction.
- (7) Steam or air piping shall be as prescribed in ANSI B31.1.0-1967, Power piping, with addenda issued before April 28, 1971, which is incorporated herein by reference and may be inspected at the Lansing office of the Department of Licensing and Regulatory Affairs Consumer and Industry Services. This standard may be purchased from IHS Global, 15 Inverness Way East, Englewood, Colorado, 80112, USA, telephone number: 1-800-854-7179 or via the internet at website: http://global.ihs.com the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, State Secondary Complex, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$96.00 \$8.00 each.
- (8) Where it is necessary to service a steam cylinder, a fixed platform, as prescribed in R 408.14249(2), shall be provided, or the employee shall wear a safety belt and lanyard, with the lanyard secured to the hammer or a structural member.

R 408.14263. Bulldozers.

Rule 4263. (1) A guard shall be attached to the side of the moving head of a bulldozer and shall extend past the stationary head to prevent persons from stepping between the dies, or another method may be used which offers equal protection. (2) A bulldozer shall be provided with a positive-type lockout device as prescribed in R 408.14247(1).

R 408.14267. Power shears.

Rule 4267. (1) A positive-type lockout device for disconnecting the power to a power shear shall be provided as prescribed in R 408.14247(1).

- (1) (2) The maximum size and specification of material being sheared on a power shear, as recommended by the manufacturer of the shear, shall not be exceeded.
- (2) (3) Effective point-of-operation guarding shall be provided at both the feeding end and discharge end of a power shear.

R 408.14269. Tumbling barrels and shot blasts.

Rule 4269. (1) A tumbling barrel shall have all of the following:

- (a) Have all means of power transmission guarded as prescribed in the Occupational Safety Standards Commission standard, Part 7, Guards for Power Transmission.
- (a) (b) Have fittings to the barrel dust-tight or the barrel shall be enclosed in a booth with an exhaust system as approved by the state department of licensing and regulatory affairs consumer and industry services.
- (b) (c) Be locked in place while being loaded or unloaded.
- (c) (d) Have an interlocked barrier across the front before it can be started.
- (e) Have a positive type lockout device for disconnecting the power to the barrel, as prescribed in R 408.14247(1).
- (2) A shot blast cleaning chamber shall have doors, curtains including silhouettes, or guards to protect the operator.

R 408.14273. Billet heating furnaces.

Rule 4273. (1) A billet heating furnace shall be equipped with an automatic valve on the main fuel line which will shut off in case of electrical or fuel supply failure.

- (2) Radiant heat from a billet furnace shall be controlled by 1 or more of the following methods:
- (a) Reflective shields of aluminum or materials of equal reflectively.
- (b) Controlled openings.
- (c) Evaporative cooling.
- (d) Water jackets.
- (e) Chain curtains.
- (3) An exhaust system shall be provided as prescribed by the state department of **licensing and regulatory affairs** consumer and industry services.